

Cardiovascular Disease in Women over 50

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Cardiovascular disease is the number one killer of men and women in the United States. Approximately 700,000 people die (26% of all deaths) each year of this preventable disease. Heart disease is actually a broad term that encompasses a number of specific conditions such as angina, coronary heart disease, and heart attacks (Department of Health and Human Services [DHHS], 2006). As defined by Encarta World English Dictionary (2006), heart disease is “any medical condition of the heart or the blood vessels supplying it that impairs cardiac functioning”.

Heart disease is the leading cause of death of American women, accounting for 32% or 366,000 of deaths per year. Since 1984, more women than men have died of heart disease. According to the American Heart Association [AHA] (2003), one in three females over 50 has some form of cardiovascular disease, representing eight million American women. Females over the age of 50 represented 53.1% of deaths from cardiovascular disease (AHA, 2003). Coronary heart disease rates in women after menopause are two to three times those of women the same age before menopause. After menopause, cardiovascular disease is the leading cause of death for both Caucasian and African -American women living in the United States. According to the CDC's National Vital Statistics Report (2004), in Kansas, heart disease was the leading cause of death, accounting for 6,680 deaths. Clearly heart disease is of importance to many Americans but particularly post-menopausal women. It is the purpose of this paper is to discuss the major risk factors facing this group.

### Review of Literature

#### *Pathophysiology*

According to the CDC (2003), coronary heart disease occurs when the coronary arteries, which supply blood to the heart muscle, become hardened and narrowed due to plaque buildup. The plaque that builds up in the arteries causing atherosclerosis is composed of cholesterol and other

lipids. As the arteries become clogged, the blood and oxygen supply to the heart is reduced and can become fully blocked.

Prior to a heart attack, most people often experience angina. Angina is chest pain that occurs when the heart receives an inadequate blood supply during periods of increased demand, such as unusual exertion or emotional excitement. During these periods, the coronary arteries expand to provide additional blood to the heart muscle. However, atherosclerotic arteries gradually become rigid, fail to dilate, and can't meet the demand. (National Heart, Lung, and Blood Institute [NHLBI], 2005).

A heart attack or myocardial infarction occurs when the blood supply to the heart is reduced or completely obstructed from the plaque build-up destroying heart muscle cells through a lack of oxygen. This damage can cause irregular heart rhythms leading to sudden cardiac arrest. Each year, more than a million individuals in the United States have a heart attack (NHLBI, 2005).

### *Warning Signs*

Warning signs for men and women vary. Sometimes no symptoms are present at all.

According to the American Heart Association (2003), the typical warning signs of a heart attack are:

- Uncomfortable pressure, fullness, squeezing or pain in the center of the chest lasting more than a few minutes.
- Pain spreading to the shoulders, neck or arms. The pain may be mild to intense. It may feel like pressure, tightness, burning, or heavy weight. It may be located in the chest, upper abdomen, neck, jaw, or inside the arms or shoulders.
- Chest discomfort with lightheadedness, fainting, sweating, nausea or shortness of breath.
- Anxiety, nervousness and/or cold, sweaty skin.
- Paleness or pallor.
- Increased or irregular heart rate.
- Feeling of impending doom.

In addition to these, women often experience different and more subtle signs of a heart attack such as:

- Shortness of breath, often without chest pain of any kind.
- Flu-like symptoms — specifically nausea, clamminess or cold sweats.
- Unexplained fatigue, weakness or dizziness.
- Pain in the chest, upper back, shoulders, neck, or jaw.
- Feelings of anxiety, often accompanied by loss of appetite and discomfort.

Many women tend to disregard these symptoms, mistaking them for stress or anxiety (Guidant Corporation, 2006). One heart attack in four produces no symptoms, or none that the victim associates with a heart attack. These so-called "silent heart attacks" are an extreme case called "silent ischemia," a chronic shortage of oxygen to the heart. By having no signs or symptoms, and therefore, no medical treatment, the heart becomes more and more damaged. This is a primary reason women and men should decrease their risk factors before damage can occur (Condos, n.d.).

### *Risk Factors*

Many factors have been identified that put people at higher risk for developing cardiovascular disease. Some can be controlled and some cannot. The more risk factors the greater the chance of developing cardiovascular disease. Additionally, the greater the level of each risk factor, the greater the risk (American Heart Association, 2003). Some can be controlled and some cannot.

Examples of controllable risk factors include elevated blood cholesterol (especially HDL or so called high density lipids), high blood pressure, and diabetes mellitus. Behavioral risk factors including smoking, a diet high in saturated fats and salt, lack of regular exercise, obesity, and alcohol consumption have also been identified as risk factors for cardiovascular disease. Stress is also a contributor to cardiovascular disease, although researchers are still unclear about its relationship to heart disease. What is known, however, is that stress can lead to other risk factors such as smoking and overeating (Texas Heart Institute, 2006).

Risk factors that cannot be changed include genetics, race, increasing age, and gender. It is also likely that people with a family history of heart disease share common environments and risk factors that increase their risk (DHHS, 2006). Moreover, race contributes to the risk of developing cardiovascular disease. African Americans, Mexican Americans, American Indians, Native Hawaiians, and some Asian Americans have a higher risk of heart disease and more severe hypertension than Caucasians. Heart disease risk is also higher among (AHA, 2003).

According to the AHA, among American Indians and Alaskan natives age 18 and older, 63.7% of men and 61.4% of women have at least one cardiovascular risk factor. Women of all races and ethnic backgrounds living in the United States between the ages of 65-84 years had the highest mortality associated with cardiovascular disease (2003).

Aging increases individuals' cardiovascular disease risk factors. Over 83% of people who die of cardiovascular disease are 65 years or older. At older ages, women who have heart attacks are more likely than men are to die from them within a few weeks (AHA, 2003). After menopause a women's risk of death from heart disease reaches 90% (Holistic Online, 2002). Researchers have connected this pattern to decreasing levels of the female hormone estrogen during menopause. Because the life expectancy for women in the United States is 79 years, women can expect to live a large part of their lives with an increased risk of heart disease (Texas Heart Institute, 2006).

Research from the Women's Health Initiative Trial (Texas Heart Institute, 2006) showed that postmenopausal women with heart disease given estrogen and progestin (Prempro) actually had more heart attacks and heart disease deaths than women who did not receive hormone replacement therapy. In 2002, one phase of the trial showed that postmenopausal women with a uterus who were taking the combination hormone treatment of estrogen plus progestin (Prempro)

were not protected from heart disease. These results lead researchers to recommend that estrogen-only therapy not be used for the prevention of heart disease (Texas Heart Institute, 2006).

### Psychological Health and Cardiovascular Disease

Stress appears to be a prevalent factor associated with perceived health. According to Ramey (2005) stress can potentiate several risk factors making it a precursor to cardiovascular disease development. Women have reported feeling powerless due to inadequate community awareness preparing them for the possibility of heart disease after menopause. Some claimed that they were in denial, refusing to accept the diagnosis. They were angry and projecting this onto family, friends, or health care professionals. Some women questioned the experience and knowledge of the physician and went for a second opinion to confirm their diagnosis. Other factors contributing to the stress was the cost associated with hospital stays, diagnostic testing, equipment, medications, and insurance (or lack thereof).

### Conclusion

The risk of death from cardiovascular disease is just as concerning to women as to men especially for women past the age of menopause. Recognition of this and the differences between the signs and symptoms for both men and women is important for all members of the health care team. As nurses, we need to be able to detect these differences and develop methods of helping, particularly post menopausal, women feel empowered to identify risk factors and catch them before they escalate into more serious problems.

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